## CS50 AP Alternative Assignments to Pi

All programs should be done in Java/Eclipse

## 29 (S)

Write a Java program that spells your name backwards by reading the string with your FULL name in it from right to left. Indexer MUST move from length to 0 .

## 30 (S)

Write a java program that calculates the perimeter of a dodecahedron with side lengths of N , where N is a random number from 1 to 40 . Then calculate the area of each interior angle. Print out the results in full sentences.

31 (S) Write a java program that fills a $10 \times 102$ dimensional array with random numbers, then calculates the average value of all the entries in the array.

## 32 (L) Exam Grade

Write a Java program that counts backwards from a (random number from 0 to 100) by (other random number from 1 to 5 ). For example, if first random number is 45 then 3 , it would count backwards from 45 to 0 by 3 .

Printout would look EXACTLY like this: (Assume random numbers are as depicted for exemplar) [Black Bold letters are exact output using your generated numbers]

## Random Number 1: 45

## Random Number 2: 3

$45,44,43,43, \ldots . .36$
35, 34, 33, 32, .... 26

## Run Complete

[you print no more than 10 numbers per line]

